## PON-08-007

Research, Development and Demonstration Grants for Improving Energy Efficiency in California's Food Processing and Dairy Processing Industry

## **Questions and Answers**

- 1) Would the Energy Commission accept applications sent by courier (FedEx etc)?
  - a) Yes, as long as the application arrives at the Energy Commission on or before the due date and time it will be accepted. Because many couriers require a name and phone number please make sure the name and phone number listed are Sarah Williams MS-1 (916) 654-4584. Please note, even if the courier guarantees delivery in time for the due date and time applications are due, if the delivery is not received by the due date and time, the application will be rejected.
- 2) Just to clarify, do renewable energy technologies that reduce the use of natural gas/electricity qualify for funding under this solicitation?
  - a) Only if the technology directly benefits the food processing and dairy processing industries.
- 3) Regarding the R&D activity, can this be accomplished in a different state than California?
  - Yes, but the project must have direct benefits to California electricity rate payers.
    Demonstration sites must be in California to demonstrate the proposed technology.
- 4) For the dairy industry, is manure to power/heat eligible for the solicitation?
  - a) This depends upon proposed project details. This solicitation will only accept projects that deal with processing milk and milk products that are performed after the milking of cows. Manure to energy would be covered under the Energy Commission's PIER Renewable RD&D Program. This program has had a long history of providing funds for manure based energy generation.
- 5) Could you please elaborate on eligible sources of match funding? I see that previously invested funds do not count. Does that mean that Applicants have to invest their own money or get another grant at the same time as this one?

- a) Yes, but match funding can also come from subcontractors and partners as well as from the Applicant. Match funding must be expended during the term of the agreement. Previous work and expenditures incurred prior to the term of the agreement do not count as match funding. Please refer to Section 23 of the Terms and Conditions for a further definition of Match Funds.
- 6) We have a regional office in California with Headquarters in another state. Does this qualify as a CBE?
  - a) As indicated in Attachment I, which reflects the definition of a CBE from California Public Resources Code section 25620.5, a CBE is a corporation or other business form organized for the transaction of business that:

Either has its headquarters or an office in California and substantially manufactures the product or substantially performs the research within California that is the subject of the award.

This means that an out-of-state company with an office in California can qualify for CBE preference points if it substantially manufactures the product or substantially performs the research within California that is the subject of the award (assuming it also meets the other requirements set forth in Attachment I).

- 7) Would projects that minimize process water use, recycle process water or minimize wastewater disposal qualify?
  - a) Only if such projects directly save energy onsite at a site involved in food or dairy processing.
- 8) Combined Heat and Power (CHP) would benefit food processing. Would (CHP) be eligible for IAW solicitation or would such projects have to go to EPAG CHP?
  - a) CHP projects would only be eligible if they directly saved energy related to food processing and dairy processing industry. Development of a generic technology that might have application in food processing or dairy processing, should apply to the current CHP solicitation issued by the Energy Commission. The only exception would be if the CHP application is uniquely applicable to the food processing/dairy segment and mitigates an industry specific problem, then it might be eligible for the IAW solicitation.
- 9) If there are multiple parties i.e., vendor and customer, can either party apply for the grant?

- a) Yes, whichever party will be most involved in the project should be the Applicant, and that can be any party which would be working on the project.
- 10) What specifically does "Outcome of research projects will be shared" on page 3?

The Energy Commission is a public agency. All Final Reports on the funded projects will be public and posted on the Commission's web site. Products for any funded project are also public. For projects that might generate or develop proprietary information or intellectual property during the execution of grant agreement, there is a process available to acquire confidential status. Please review Section 22 of the Terms and Conditions for more information about confidentiality.

- 11) Page 4 of the solicitation states that the funds for the solicitation are from the Natural Gas and/or Electricity program, from your statements it sounds like they are coming from the electric side. Which is correct? The solicitation also states that the research funded could improve natural gas energy efficiency.
  - a) Page 4 of the solicitation is referring to PIER funds in general. Funds for this solicitation are only from electricity funding. Yes, this solicitation seeks technologies that could improve natural gas energy efficiency.
- 12) You mention that manure to energy would be covered under a renewable program. Could you refer me to those materials? Are there active solicitations regarding renewables?
  - a) Yes. The PON-08-004 which addresses renewables can be found at: <a href="http://www.energy.ca.gov/contracts/index.html">http://www.energy.ca.gov/contracts/index.html</a>
- 13) So would projects that only save natural gas qualify?
  - a) It would depend upon the project. If there are substantial onsite natural gas savings then it might qualify for this solicitation.
- 14) The deadline for one of the other PIER proposals was recently extended. Given the holidays, is there a chance that this deadline will be extended as well?
  - a) No.
- 15) Do technologies have to directly benefit the targeted industries?
  - a) Yes.
- 16) Is the purchase of equipment restricted to \$5,000 from PIER funds?
  - No. In general, equipment is defined as an item with a unit cost of \$5,000 or more, with a useful life of at least one year, and purchased in whole or part with

Energy Commission funds (please refer to Section 23 in the Terms and Conditions for a complete definition). Although Applicants are not restricted in the amount of PIER funds spent on equipment, realize that the Energy Commission is involved in the disposition of equipment at the end of the grant (please refer to Section 13 in the Terms and Conditions).

- 17) Is generating biogas from dairy/food processing acceptable for this solicitation?
  - a) Only if the project involves a new technology for generating biogas from food/dairy processing waste. Generation of biogas from manure will not be considered under this solicitation. If the proposed technology is not new and the Applicant is merely seeking funds as a buy-down for an existing waste-to-energy technology, the proposal will not meet the purpose of this solicitation.
- 18) Is there any preference for food processing as opposed to dairy processing?
  - a) No.
- 19) How do royalty payments apply (PIER Terms and Conditions, Attachment K, Section 26, page 29)?
  - a) As indicated in the terms and conditions, the obligation to pay royalties starts after the first sale of any Project-Related Products and Rights (see Section 23 for a definition of this term). There are two options for payment: (1) an early buyout in which two times the amount of PIER funds received is payed back within two years of the date royalties are first due, or (2) 1.5% of the Sales Price (see Section 23 for a definition) on Sales of all Project-Related Products and Rights is paid for 15 years.
- 20)I am looking at the two solicitations for, I am trying to determine what the primary focus is for both grants? What are the different targets or preferences? I am working with a dairy on a state of the art anaerobic digestion power generation project, a design and technology that is not currently in CA. I could use grant funds but am not sure which of the two grant opportunities is the best to apply.
  - a) PON-08-007's target is seeking new technologies for Improving Energy Efficiency in California's Food Processing and Dairy Processing Industry. The state of the art anaerobic digestion power generation project, a design and technology is not eligible for this solicitation. Please refer to the response to Questions # 17. PON-08-006 is for demonstration of any industrial technology that has been proven at a pilot scale and is now ready to be demonstrated at a customer site in California. Please refer to that PON for details.

21) With respect to the terms and condition (T&C) (Attachment K), we have a question about Section 26.

Section 26a states "Recipient agrees to pay Energy Commission a royalty of one and one-half percent (1.5%) of the Sale Price on Sales of all Project -Related Products and Rights that the Recipient receives."

With respect to "Project-Related Products and Rights", we have an existing technology related to highly efficient drying and nutraceutical extraction of agricultural and dairy products that has been in development over a multi-year period. The process we use extracts water, lipids, and neutraceuticals and, thus, is fundamentally different than all existing thermal drying processes. There are both patents and trade secrets resulting from earlier funded effort.

Furthermore, in the intervening period between now and the award of the PIER grant, we anticipate that there will be development and testing to pilot subsystems to prove out critical questions associated with the design and implementation of the pilot plant. We anticipate that our proposed program would likely involve the integration of the pilot subsystem building blocks, installation of a demonstrator system at the Grimmway facility in Bakersfield, testing and optimization of this equipment. Moreover, we would like to make the design, implementation, and installation of a larger scale pilot system a portion of the proposed program- all scope that will be paid under Match funding. This pilot system is intended to be a revenue generating process (i.e., a small-scale commercial implementation).

Subsequent to this development, we plan a full scale commercial implementation of the technology that would be built on both the background technology and optimized using the benefit of test data under the program. This full scale commercial implementation would initially be operated by Grimmway. Subsequent to this commercial implementation, there is significant opportunity to broadly apply this technology within the broader vegetable and fruit industry and the dairy industry.

- 1) With respect to the proposed program does the royalty cover sales of technology that is directly related (i.e., Subject Inventions per definition in the T&C) that were directly paid for by the PIER funding? If there are Subject Inventions created under the program but are funded by the Match, does the royalty apply?
  - (a) The term "Subject Invention" has to do with intellectual property rights and not royalty repayments. "Subject Invention" is defined in Section 23 in the terms and conditions and only includes "the Energy Commission-funded portion of this Agreement (i.e., that portion of this Agreement for which Recipient has invoiced the Energy Commission and received reimbursement)." Thus, something paid for with match

funding is not a "Subject Invention." Please refer to Section 25(j, k, and l) for references to where the term "Subject Invention" is used.

Royalties, as explained in Section 26 of the terms and conditions, applies to "Project-Related Products and Rights" which is also defined in Section 23. Unlike, "Subject Invention," the term "Project-Related Products and Rights" is defined in such a way as to include matchfunded activity under a project. Thus, there will not be a difference in royalty payment based on what is and is not paid for with PIER funds versus match funds.

- 2) If there is background technology (i.e., preexisting patents, trade secrets, and confidential information) that is disclosed at the project kickoff meeting, does PIER expect to receive a royalty associated with this technology sale?
  - (a) First, the Energy Commission discourages the use of any confidential material within its grant agreements. As a result, we will work with recipients to try and minimize and/or eliminate the need for confidential material. Secondly, the disclosure of information in of itself would not trigger royalty payments. Royalty payments apply to "Project-Related Products and Rights," and as defined, this would not include the mere disclosure of information. In contrast, if pre-existing patented items, trade secrets, etc. are updated, modified, enhanced, etc. under the project, then such activity would fall under the definition of "Project-Related Products and Rights" and be subject to royalty payments.
- 3) In the course of the proposed program, if there is equipment purchased by Match funds and, either within the duration of the program or thereafter, revenue is generated through products derived from this equipment, is a royalty due on this revenue?
  - (a) If the use of the equipment meets the definition of "Project-Related Products and Rights," then yes.
- 4) If the proposed program were to use PIER funds for a test system deployment, test program, and process optimization study for which there may or may not be new Subject Inventions, is a royalty due on the operation of the test equipment or subsequent derivative works from this equipment?
  - (a) As explained above, royalty repayments apply to "Project-Related Products and Rights." If the activity meets the definition of "Project-Related Products and Rights," then yes, royalties would have be paid.
- 5) If there are subsequent embodiments of background technology that leverage the benefit of the optimization results derived from PIER funding, is there a

royalty due on the revenue from products resulting from these subsequent embodiments?

(a) The definition of "Project-Related Products and Rights" to which royalties apply is purposefully written very broadly and would appear to encompass the described situation. The latter part of the definition includes, "any and all updates, revisions, modification, enhancements, derivations, variations, additions, continuations, renewals, and extensions thereto and all proceeds and products therefrom."